

*Disclaimer: These are my remembrances of the PAVS, written in the spring of 2002*  
*David Atwood*

Nam June Paik and the Paik-Abe Videosynthesizer.

Timeline:

1969-70 created in Japan, shipped to the US, tested in Cambridge Mass.

Summer 1970 moved to WGBH "Studio C"

August 1, 1970 maiden voyage with "Video Commune, The Beatles From Beginning to End" live on WGBX, Channel 44

1972 Moved to the "middle green room" across the hall

1974 moved to the New TV Workshop on Galen Street in Watertown

1976 moved to MIT Center For Advanced Studies

I got involved as I was experimenting with video on a live music series: "Mixed Bag" which had grown out of a series called simply "Jazz" I started directing "Jazz" in the late 60's. The previous director, Bill Cosel, a mentor, had done one show where a light show group was brought in and their watery images projected on a screen and mixed into the video. When I took over, my co-producer Lee Tanner suggested we try some more of these as the series had to branch out musically under it's new title Mixed Bag. Lee brought in jazz, and jazz rock, and the like. We did 4-5 of these light shows, all of course, live. I have them on tape today as I saved the 2" tapes then returned them to WGBH once they changed from throwing out their history to collecting and conserving it. The light shows were almost total abstract video: keying, mixing in the light show group's soup, double keying, supers, everything. In those days I switched my own show and got away with a lot. The engineers were in agony. Fred Barzk, Olivia Tappan and I dragged about 100 lbs of 2" videotape to New York to show to the artists and people proposing us for Medium is the Medium. Several of the shows were mine.

I worked on all the "Medium is the Medium" (not a show but a segment within a show) pieces mostly as a co conspirator with Fred and Olivia (both still close friends) in the studios. Paik's piece was the most controversial not just for the topless dancer but the busts of Nixon and his cronies getting badly twisted electronically. The topless dancer was supplied buy a GBH type who had connections everywhere in Boston. When asked if he could produce one, he did. We never knew from where and never asked. She

showed up, took off all but panties, stood on a pedestal, was directed by Paik, was recorded, and left. There was tight security on the studio and it was a minor scandal at the time. The delayed, three negative color technique was thought up by an enlightened WGBH video engineer: Steve Rogers. Three recordings, each from a different camera tube, then in the editing recordings #2 and #3 were delayed and supered producing an eerie, ghostly, triple negative color image effect.

After "Medium" the Rockefeller program was created and Paik came to Boston. I was "assigned" to work with him as we had got along well in the creation of his Medium piece. We planned some studio experiments on image distortion using his electrically "altered" console TVs and planned to record it all. I think that was the fall of '69. According to my memory, the "9/23" experiments was a studio session where we were testing out the video ideas that would eventually go into the Paik-Abe Videosynthesizer the next year. I think of it (and I think Paik did also) as the birth of the Videosynthesizer imagery. Then he got the money for the synthesizer and took off for Japan. When he returned he had the synthesizer with him. And it went into the front room of the apartment we shared.

Paik and Abe set up the synthesizer and got it running, then moved to WGBH to get it hooked up to their system. I became it's advocate, interpreter, baby sitter, and interference runner. Throughout the summer of '70 we transformed an old studio into what looked like an electronics junk shop combined with a cheap trinket store. Paik had bought all manner of stuff: plastic dishes, cheap busts of famous composers, and anything that costs nothing and would distort light. We got a WGBH audio man, Nat Johnson, to put all the Beatles recordings in creation sequence on audio tape which became the score. And it went live, August 1, 1970. I was in the control room kinda making sure they aired it, adding the sound and some other video stuff. Paik and maybe some others were in the studio, at the controls making video. The broadcast burned up a chroma filter on the Channel 44 transmitter. But it's maiden voyage was spectacular. Four hours of far out imagery never before seen by the world. The premier of the Paik Abe Videosynthesizer: "Video Commune, The Beatles Beginning to End" on Ch 44. .

Years later I found the original of a memo that the droll president of WGBH, David O. Ives, wrote 7 days before it aired. The program had been publicized in the WGBH

Program Guide. Ives had seen the listing for August 1 9:00pm to 1:00 am repeat . So he took a piece old WGBH blue stationary, put it reversed into his trusty Royal and wrote to Fred Barzyk: (I found the original and copied it several years ago):

"June 23

*Barzyk*

*I have just seen the program guide piece on the Paik experimental broadcast for Aug 1.*

*I strongly suggest that, if you have not already planned it, you prepare some videograph (keyed in video text - Ed) copy and run it onto the screen every (2 letters penned out - Ed) ten or 15 minutes, at least early in the show.*

*Copy should indicate that it is an experiment, that it is better seen in color, that it has no formal start or finish, etc. Just something to keep down the volume of complaints as to what the hell you communist, pinko, Maoist, bastards are doing.*

*Also, be sure to supply the switchboard that night with all the necessary soothing talk for complaining callers.*

*DOI*

(of course he wasn't serious about the " communist pinko Maoist bastards", that was his humor)

My best remembrance of living with Paik during that time was one day in the apartment when Paik came to me to ask for help moving some console TVs. Since he didn't have a lot of extra money, he slept on a piece of foam on top of 3 or 4 TVs. But he had a bunch more scattered about the apartment, one for a kitchen table. We pushed and shoved then into his room and lined them up next to his. Finally came the explanation: "Lady coming to visit" And she did, from Japan, his co artist friend and partner Shigeko (spelling)

Paik must have been there at WGBH while more under the grant, then was lured away by WNET to help with their experimental lab and build another synthesizer. Our synthesizer sat idle unless I'd go in to turn it on and play but at the time I had so much

going on directing there was no time for play. Then Ron Hays came to GBH on a separate Music Image Workshop grant.

Because of the expensive studio experimenting day back on 9/23/69, Paik decided that he needed more direct access to the tools that created imagery. And that it was better to have those tools directly in hand, than having to work through layers of production people (us) and engineers. He didn't have a lot of money to create it, maybe 10 grand (George Fifiel might say how much in his article). So the Paik Abe Video synthesizer was actually a collection of cheap parts. At the heart were two small racks, two mixer - color encoders where you controlled in a very basic way the mixing of the video signals. Each of these racks were capable of putting out a signal thus, in reality there were two synthesizers, not one. And in fact we thought of them as the first two ever built by Shuya Abe. Why there were two I don't exactly remember but it's very possible that Abe built one, tried it out, then built a second in an attempt to better the first. Paik decided to use both and had Abe feed the signal of one into the other.

Beside these two encoders were two regular full size TV equipment racks. The first housed monitors and scopes etc, the second had a couple B&W camera pointing at small B&W monitors that had been Paik-ized to distort a video signal. The signals were distorted by tone generators, oscillators feeding amplifiers to hand wound coils that Paik had wrapped around the picture tubes of the TVs. The cameras were basically Sony surveillance grade. These two cameras, and the 10-12 odd others fed their signals into the encoder racks where they were colonized and mixed, possibly there was a crude keyer also. The other cameras, some with view finders some not, had a variety of lenses, and were mounted on cheap tripods scattered about. These could be used to shoot monitors, objects, whatever. In addition there was an assortment of large floor console color TVs totally modified. At least one had a the signature lisague (sp) Paik image: three colored lines, often in a figure eight-like shape, lazily revolving on the screen. Finally there was all manner of props, and image sources, toys, busts, clear plastic plates. cheap lamps and cables everywhere. Behind the synthesizer racks was the "Green Frog", my story that Fifiel includes in his article.

So this whole thing was the exact opposite of the equipment in the rest of the building. WGBH in 1970 had close to the top of the line broadcast equipment and prided itself in

setting the highest technical standards. In fact it was a technical leader in the PBS system. The Synthesizer was a collection of the cheapest electronics around, the bare minimum. It was a miracle that it even made an image. But it was open to be used by anyone. And unlike the pro gear in the care of experienced engineers which would yield precise video results, the Synthesizer was electronically organic. Duplicating an image was illusive, in fact, impossible. It was capable of making stunning, breath taking abstract imagery, but the next day, even the next hour or minute, that exact image was gone forever. The dials were not calibrated, they were usually inexpensive potentiometers marked only with some tape and a pen.

But once Ron Hays arrived he looked at the Synthesizer and decided to try and bring it under control. Ron spent hundreds of hours experimenting, and cataloguing. He wrote it all down, image types, settings, camera positions. And he could, with time and his notes, recall an image that would be close to the previous version. The difficulty was enormous, no one ever appreciated it. Much of the imagery used pieces of video feedback which itself is illusive to recreate exactly. With the cheap camera and tripods the job became almost impossible. One fraction of an inch difference in camera position, distance, horizontal, or vertical, would yield very different results. One tiny twist of a knob on the encoders, or an oscillator, would throw it all off.

But Ron was able to come very close. We did a live insert of the Synthesizer into a BSO broadcast, of Ravel's Daphnis and Chloe, overlaying the Synth's video on top of the regular camera treatment, and Ron practiced for weeks. And he delivered the signals, it was beautiful. When he came to the Prelude to Tristan and Isolde we recorded so we could do multiple takes. But recording to WGBH's 2" VTRs was a trial. WGBH engineering almost to a person hated the thing. They went out of their way to keep it from being recorded. Since I was it's caretaker and baby sitter, I had to get it recorded. Ron and I never knew from time to time if we would actually make it to videotape. I would schedule time, then begin the process of asking the engineers to patch it through. I knew where the patches were and I learned the process, and understood most of the concepts. But it was an exercise in trying to figure a way around the problems that either occurred naturally or were encouraged to occur. One engineer in particular was in just short of a rage when assigned to hook the thing up to the system so the tape room could dial it up and record it. And in the synthesizer room I had Ron who had worked

weeks on a series of images to get them recorded, praying I could make it happen one more time.

Even though I was not supposed to know anything about hooking it up, they would often make me point out the outputs on the patch field where the Synthesizer was. Then they put the signal through several devices to limit and control it's output so that there wouldn't be a repeat of the chroma filter burn out that happened on the launch. Finally, the last step was the chroma phase issue. It was always out of phase, something they could control only like 5 to 10 degrees. But I had learned or figured out that overall chroma phase could be adjusted by adding or subtracting video cable at the point where the signal plugged into the wall of our room. The formula was two degrees per foot of cable. So when told it could not be recorded that day as it was too far out of phase, I would say wait a minute, go into the Synthesizer room, behind the racks to the plastic green frog kid's tub, where I had stored 30 - 40 pieces of video cable borrowed from the building and carefully labeled to length, do the math in my head, put together the right amounts of cable, plug it back to the wall and return to master control where, presto, we would be within the range of their adjustment. It was a dance we went through every time we recorded.

But when I look at Ron's work, especially "Tristan and Isolde" I'm still thrilled. It's beautiful and with all the sophisticated electronics of today I don't believe it can never be duplicated.

The Synthesizer room became a place for a few artists like Ron to hang out, space out on the imagery. Ron and others would work deep into the night, making imagery, probably smoking dope, and trip to the flow of video that came off the Paik Abe. You could walk by the partially open door and see this crazy, wonderful stuff flowing, glowing on a dozen TVs and monitors. I didn't do much of that, either the video tripping or the dope. Maybe once or twice just to watch, not to smoke. That was the scene, all after Paik had left WGBH and Boston.